# IPS InLine Ceramic System (Ivoclar-Vivadent North America) (Project # 07- 01) (7/08)



IPS InLine is a leucite-based ceramic system for the fabrication of metal-ceramic restorations. It is advertised to possess a grain size distribution that provides the efficient production of highly esthetic, metal-ceramic restorations. IPS InLine is said to demonstrate good laboratory handling characteristics to include good firing stability and low shrinkage. Specifically, this ceramic material is touted as possessing optimal sintering behavior that allows restoration completion with only one or two main firings. IPS InLine is advertised to produce naturally-appearing restorations with excellent shadematching properties, and is available in either 16 A-D or 20 Chromascop



shade delivery systems. Additional add-on systems are available and described to enable clinicians to achieve special effects and/or overcome challenging esthetic demands; the IPS InLine Deep Dentin Kit is offered for restorations with limited ceramic thickness and/or situations where chroma intensification is required. The IPS InLine Impulse Kit provides 16 different materials for individual characterization while the IPS InLine Margin Kit is said to facilitate the fabrication of ceramic (porcelain shoulder) margins. The Shade/Stains Kit for both the IPS InLine and IPS InLine PoM (press on metal) systems contains 14 shades for ceramic surface modification. In addition, bleach and gingival shade systems are also available. This evaluation involved the IPS InLine Basic A-D, Deep Dentin, Margin, Impulse, and Shade/Stains kits to assess its ability to provide a basic system to meet most dental facility needs.

#### Manufacturer:

Ivoclar Vivadent North America 175 Pineview Drive Amherst, NY 14228 (800) 533-6825 (716) 691-0010 (716) 691-2285 FAX www.ivoclarvivadent.us.com

# **Suggested Retail Price:**

\$1,099.00 IPS InLine Basic Kit A-D (#591551) Contains:

8-3 g IPS InLine/IPS InLine PoM Opaquer; Shades: A1, A2, A3, A3.5, B2, B3, C2, D3

4- 3 g IPS InLine/IPS InLine PoM Intensive Opaquer; Shades: white, violet, brown, incisal

8-20 g IPS InLine Dentin; Shades: A1, A2, A3, A3.5, B2, B3, C2, D3

1- 20 g IPS InLine Cervical Dentin; Shade: D2/D3

3- 20 g IPS InLine Transpa Incisal: Gradations: TI1. TI2. TI3

1- 20 g IPS InLine Transpa; Shade: clear

1-3 g IPS InLine/IPS InLine PoM Glaze

1- 20 g IPS InLine Add-On

1- 15 mL IPS InLine/IPS InLine PoM Opaquer Liquid

2- 60 mL IPS InLine/IPS InLine PoM Build-Up Liquid; L and P

1- 15 mL IPS InLine/IPS InLine PoM Glaze and Stains Liquid

1-50 mL IPS Model Sealer

1- 15 mL IPS Ceramic Separating Liquid with Brush

3- IPS InLine material shade guide; Opaquer A–D, Dentin A–D, Incisal A-D Includes at no extra cost the IPS InLine/IPS InLine POM Shade/Stains Kit (#593299) Contains:

7- 3 g IPS InLine/IPS InLine PoM Shade; Shades: 1, 2, 3, 4, 5, 6, 7 2- 3 g IPS InLine/IPS InLine PoM Shade Incisal; Shades SI1, SI2

14- 1 g IPS InLine/IPS InLine PoM Stains; Shades: white, mahogany, khaki, orange, grey, vanilla, crackliner, olive, yellow, black, maroon, basic blue, basic red, basic yellow

1-3 g IPS InLine/IPS InLine PoM Glaze

1- 15 mL IPS InLine/IPS InLine PoM Glaze and Stains Liquid

\$180.25 IPS InLine Deep Dentin Kit A-D (#593158)

Contains:

8- 20 g IPS InLine Deep Dentin; Shades: A1, A2, A3, A3.5, B2, B3, C2, D2/D3

1- IPS InLine Deep Dentin material shade guide A-D

\$339.25 IPS InLine Margin Kit A-D (#593157)

Contains:

8-20 g IPS InLine Margin; Shades: A1, A2, A3, A3.5, B2, B3, C2, D2/D3

4-20 g IPS InLine Intensive Margin; Shades: yellow, orange, orange-pink, opaque

1- 20 g IPS InLine Margin Add-On

1- 60 mL IPS InLine Margin Build-Up Liquid

1- 20 mL IPS Margin Sealer

1- 15 mL IPS Ceramic Separating Liquid with Brush

1- IPS InLine Margin material shade guide A–D

\$370.25 IPS InLine Impulse Kit (#593269)

Contains:

2- 20 g IPS InLine Occlusal Dentin; Shades: orange, brown

2- 20 g IPS InLine Cervical Incisal; Shade: orange, yellow

3- 20 g IPS InLine Mamelon; Shade: yellow-orange, light, salmon

6- 20 g IPS InLine Opal Effect; Shades: 1, 2, 3, 4, 5, violet

3- 20 g IPS InLine Transpa; Shades: neutral, blue, brown-grey

1- IPS InLine Impulse material shade guide

#### **Government Price:**

\$745.00	IPS InLine Basic Kit A-D (item number and contents as listed above)
\$158.62	IPS InLine Deep Dentin Kit A-D (item number and contents as listed above)
\$298.54	IPS InLine Margin Kit A-D (item number and contents as listed above)
\$325.82	InLine Impulse Kit (item number and contents as listed above)

## **ADVANTAGES:**

- + Flexural strength exceeds ISO 6872 requirements
- + Fracture toughness exceeds ISO 6872 requirements
- + Radiopacity exceeds that of dentin
- + Manufacturer instructions easy to read and complete
- + Well organized and labeled system components
- + Excellent laboratory/clinical handling characteristics
- + Porcelain shoulder technique similar to other ceramics
- + Reported to provide excellent esthetics
- + Reported to be easier to use than comparable ceramic systems
- + Judged to be excellent system (as configured) to meet most federal service clinical needs

## **DISADVANTAGES:**

(None reported)

### **SUMMARY AND CONCLUSIONS:**

IPS InLine is a leucite-based ceramic system designed for the fabrication of metal-ceramic restorations. IPS InLine exceeded international standard requirements for parameters evaluated by DECS laboratory testing and was demonstrated to be more radiopaque than dentin. IPS InLine was clinically evaluated by two senior, board-certified prosthodontists who fabricate a large majority of their own metal-ceramic restorations. The clinical evaluators found the IPS InLine system to be well organized. IPS InLine also integrated well into their existing fabrication technique and demonstrated excellent laboratory handling

characteristics. IPS InLine was further reported to be easier to use than other comparable metal-ceramic systems and provided excellent esthetics and shade match, which reinforces an earlier laboratory-technician assessed DECS evaluation (Project # 05-34). The IPS InLine system as configured succeeded at the esthetic challenges over the course of this 12-month evaluation and was judged as being an excellent system to meet the needs for most federal service dental clinics. Overall, both senior prosthodontists were impressed with both the laboratory handling characteristics and clinical esthetics of IPS InLine to the point that one of the evaluators has already integrated the IPS InLine PoM (press on metal) system into their laboratory. Based on the reported simplicity, excellent handling characteristics, and esthetic capability, **IPS InLine** is rated **Outstanding** for use in US Air Force dental clinics.